| Forster Manufacturing Company, Inc. | ) | Departmental                |
|-------------------------------------|---|-----------------------------|
| Franklin County                     | ) | Findings of Fact and Order  |
| Strong, Maine                       | ) | <b>Air Emission License</b> |
| A-342-71-K-M                        | ) | Amendment #1                |

After review of the air emission license minor revision request, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

### I. REGISTRATION

Forster Manufacturing Company, Inc. (Forster), a woodenware manufacturing facility located in Strong, Maine, has submitted a minor revision to add additional types of fuel allowed in the wood boiler. The fuel request includes defective wooden matches and off-specification waste oil and oily rags.

Air emission license A-342-71-J-R, issued to Forster on September 25, 2002, includes a boiler and process equipment.

# II. MINOR REVISION DESCRIPTION

### A. Wooden Matches

Forster has requested to burn wooden matches that have been deemed defective in boiler 1. The matches are in individual paperboard boxes wrapped with a polypropylene wrapper. The fireplace-type matches are approximately 11 inches long. The matches will normally be packaged in a case, with 24 of the individual boxes per case. Each case weighs approximately 9.3 lbs with 9 lbs of the case being the wooden matches and the remainder being a combination of corrugated cardboard, paperboard, and polypropylene.

The Department approves the burning of the packaged defective matches in boiler 1. Forster has an initial amount of matches (688 cases) that may be fired in the boiler. Following the initial batch of matches, no more than four 55 gallon drums of the matches shall be burned annually. Forster shall meter them in with the wood normally fired in the boiler such that the boiler continues to run efficiently and safely. Records shall be kept of the amount fired on a monthly and 12 month rolling total.

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## B. Off-Specification Waste Oil and Oily Rags

Forster has requested to burn waste oil and associated oily rags from the East Wilton facility in boiler 1 at the Strong facility. The following sets forth the classification standards for waste oil. The oil cannot otherwise exhibit hazardous waste characteristics and cannot be mixed with a hazardous waste.

| Constituent/Property | Specification Waste Oil<br>Allowable Level* | Off-Specification Waste Oil<br>Allowable Level* |
|----------------------|---|---|
| Arsenic              | 5.0 ppm max.                                | 18 ppm max.                                     |
| Cadmium              | 2.0 ppm max.                                | 10 ppm max.                                     |
| Chromium             | 10 ppm max.                                 | 35 ppm max.                                     |
| Lead                 | 100 ppm max.                                | 1000 ppm max.                                   |
| Polychlorinated      | 10 ppm max.                                 | 49 ppm max.                                     |
| Biphenyls (PCB)      |   |   |
| Total Halogens       | 1000 ppm max                                | 4000 ppm max                                    |
| Flash Point          | 100°F min                                   | 100°F min                                       |

<sup>\*</sup> concentrations are in parts per million dry weight basis, values for metals are for total metal concentration, not EP toxic concentration.

Forster tested a sample of the oil from East Wilton and the results were below the off-specification waste oil allowable levels. The oil cannot be classified as specification waste oil since the total halogens results were above 1000 ppm. However, the results showed that the test sample was below the off-specification classification of 4000 ppm for halogens, in addition to being below the other allowable constituent levels.

Currently, the Bureau of Air Quality allows the burning of off-specification waste oil if the licensee:

- ensures the waste oil is not considered hazardous waste and meets all of the standards for off-specification waste oil,
- amends the current air emission license,
- performs an analysis of a representative sample of the waste oil,
- uses a boiler with a heat input capacity of at least 25 MMBtu/hr equiped with a high efficiency particulate control,
- ensures the sulfur content of the waste oil does not exceed the licensed allowed sulfur content, and
- maintains records of the quantity and type of waste oil burned.

Forster estimates that the Strong facility will burn approximately four 55 gallon drums of off-specification waste oil per year and approximately two 30 gallon

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drums of oily rags per month from the East Wilton plant. The boiler at Strong is rated at 33.7 MMBtu/hr and is controlled by a multiclone.

The Department approves the burning of off-specification waste oil and associated rags from the East Wilton facility in the boiler at Strong. Forster shall meter (mix) the oil and rags in with the regular wood fuel to allow for consistent combustion. The emission limits of license A-342-71-J-R shall remain in place. Forster shall not exceed six 55 gallons drums of East Wilton waste oil per year and three 30 gallon drums of oily rags per month from East Wilton. If the origin of the waste oil at the East Wilton facility changes, then another representative sample shall be tested and submitted to the Department for approval prior to firing it in the boiler.

#### **ORDER**

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

- will receive Best Practical Treatment.
- will not violate applicable emission standards, and
- will not violate applicable ambient air quality standards, or increment standards either alone or in conjunction with emissions from other sources.

Therefore the Department grants this amendment A-342-71-K-M, subject to the conditions found in air emission license A-342-71-J-R, in addition to the following conditions:

### **New Conditions:**

### (24) **Defective Wooden Matches**

- A. Forster may burn boxes of defective wooden matches in boiler 1. An initial batch of 688 cases may be burned. Once the initial batch is gone, no more than four 55 gallon drums of the matches shall be burned annually.
- B. Forster shall mix the match boxes in with the wood normally fired in the boiler.
- C. Records shall be kept of the amount of matches fired per month and on a 12 month rolling total (ie full 55 gallon drum full, ½ drum, etc).

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| (25)  | Of   | f-Specification Waste Oil/Oily R               | ags from the   | East Wilton Facility   | y          |
|       | <ul> <li>A. Forster may mix specification or off-specification waste oil from the East Wilton facility with the wood waste fired in Boiler 1. The off-specification waste oil shall not include any hazardous waste.</li> <li>B. The firing of off-specification waste oil from East Wilton shall not exceed 330 gallons per year, based on a 12 month rolling total. Records shall be maintained documenting the gallons of off-specification waste oil fired each month from East Wilton and the 12 month rolling total.</li> <li>C. Forster may mix oily rags from the East Wilton facility with the wood waste residue fired in Boiler 1. The oily rags must originate from the East Wilton facility only and the permeated oil must meet the requirements of specification or off-specification waste oil. Forster shall not exceed three 30 gallon drums per month of East Wilton oily rags. Forster shall maintain records of the amount of oily rags burned each month from East Wilton (ie – a full 30 gallon drum, ½ drum, etc).</li> <li>D. An analysis of a representative waste oil sample from East Wilton shall be kept on site at the Strong facility. If there are changes in the process that may effect the composition of the waste oil collected, a new representative sample shall be tested. These test results shall be kept on-site and a copy shall be submitted to the Bureau of Air Quality.</li> <li>E. Forster shall meet any applicable requirements from Chapter 860 of the Department's regulations 'Waste Oil Management Rules' regarding the waste</li> </ul> |  |                |  |            |
| (26)  | The  | oil. e term of this order shall be concu       | rrent with the | term of air emission   | license A- |
| (20)  |  | 2-71-J-R.                                      | irent with the | term of an emission  | neense 11  |
| DONE  | AN   | ND DATED IN AUGUSTA, MAIN                      | NE THIS        | DAY OF   | 2003.      |
| DEPA  | RTN  | MENT OF ENVIRONMENTAL P                        | ROTECTION      | I  |            |
| BY:   |  | OKE E. BARNES, ACTING COM                      | MISSIONER      |  |            |
| PLEAS | SE N   | NOTE ATTACHED SHEET FOR                        | GUIDANCE       | ON APPEAL PROC   | EDURES     |
|       |  | tial receipt of application: <u>December 1</u> |                |  |            |

Date filed with Board of Environmental Protection:\_\_\_\_\_

This order prepared by Kathleen E. Molokie, Bureau of Air Quality.